1.933 P878 Suppl.

SUPPLEMENT II TO POWER COST STUDY WISCONS IN 64 LACROSSE

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL ELECTRIFICATION ADMINISTRATION WASHINGTON 25, D. C.

JULY 17, 1951

Approved by:_

Thomas B. Dunphy, Head Power Procurement Section

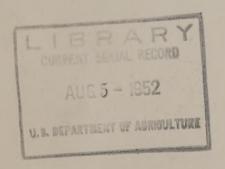
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SUPPLEMENT II TO POWER COST STUDY

WISCONSIN 64 LACROSSE

SYSTEM POWER ANALYSIS

The purpose of this supplement is to amend the Supplement No. 1 dated June 29, 1951 to cover the changes in the estimated cost of moving the Baldwin Units to Twin Lakes.

When the Dairyland system is operating at the allocated load of 470,051,820 kwh at the member cooperatives' substations the cost of power is estimated to be 1.19 cents per kwh. This includes the change proposed in this supplement and is the same cost of power as was reported in the Power Cost Study of December 20, 1950 and Supplement No. 1 dated June 29, 1951.

J. K. Taylor, Head Power Planning Staff

Power Division

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J. K. Thylor, Head Power Plausing Staff Power Division

SUPPLEMENT II TO POWER COST STUDY

WISCONSIN 64 Lacrosse

POWER COST STUDY

Since the Supplment No. 1 of June 29, 1951 was prepared a new estimate of the costs of moving the Baldwin units to Twin Lakes and associated expenses has been received from the cooperative with their letter of July 6, 1951. This change increases the estimated cost by \$124.500,

This change in investment and the new budget for the job is set out in detail as Appendix II. The load data used in this supplement remains the same as that used in Supplement No. 1 dated June 29, 1951. This study does not, therefore, include load data. Appendix I of Supplement No. 1 should be referred to for load data.

This change does not affect the cost of power to the Dairyland system. The estimated cost of power under allocated conditions is 1.19 cents per kwh delivered at the member substations.

The details of the cost of power are included as Appendix III. Appendix III makes reference to the Supplement No. 1 dated June 29, 1951 as the analysis modifies only the items effected by this change.

This change does not effect the economic advantage to the cooperative of moving the units compared to the installation of new units as the increase in cost would effect each alternative equally.

As in the case of Supplement No. 1 dated June 29, 1951, this study does not include the interest and amortization of the funds remaining under stop order for the redevelopment of Port Arthur. It also includes only the capacity and output of Port Arthur prior to redevelopment.

This Supplement No. 2 should be considered in conjunction with Supplement No. 1 dated June 29, 1951.

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This Supplement No. 2 should be considered in conjunction of the Supplement No. 1 deted June 29, 1991.

APFENDIX II

INVESTMENTS

A. Cha	nges over	PCS	Supplement	No.	1	dated	June	29,	1951
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1.	Moving of Baldwin	Units	to	Twin	Lakes	-	New	Budget
	Cash Requirements	Only						

	(a) Structure & Improvements	\$171,400
	(b) Internal Combustion Engines	173,360
	(c) Accessory Electrical Equipment	35,000
	(d) Station Equipment	112,240
	(e) Overhead	18,000
	Total at Twin Lakes	\$510,000
	(f) Loading at Baldwin Total	\$527,000
2.	Source of Funds (a) Reduce Port Arthur (Iast Loan) by	\$527,000

B. Budget Last Loan With Changes

30,000 kw unit Stoneman Baldwin Deficiency Move Baldwin Units to Twin Lakes Port Arthur Hydro Transmission Miscellaneous Total	\$3,159,000 61,500 527,000 1,526,000 1,749,000 231,500 \$7,254,000
Less Funds Available Previous Loan	1,814,000
Net Loan	\$5,440,000

C. Stop Order Changes

Stop Order in Effect (Port Arthur)	\$2,053,000
To Be Lifted and Used for Twin Lakes Changes	527,000 \$1,526,000
To Remain Under Stop Order	\$1,526,000

D. Total Funds With Changes (a)

<u>Item</u>	Amount
Chippewa Diesel	\$587,420.00
Alma Steam	8,240,000.00
Baldwin Diesel (a)	861,500.00
Stoneman Steam Unit 1	4,552,000.00
Stoneman Steam Unit 2	3,159,000.00

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	(a) Accusacy Electrical
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	(1) Loading at Buildein

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APPENDIX II (Cont'd)

INVESTMENTS

Item	Amount
Flambeau Hydro	\$6,508,776.11
Genoa Steam	2,246,786.00
Lanesboro & Rushford Hydros	265,103.00
Leased Hydros	96,223.89
Port Arthur Redevelopment (a)	•
Twin Lakes Existing	1,227,000,00
This Addition - Twin Lakes	527.000.00
Sub-Total Generation	\$28,270,809.00
Miscellaneous (PCS Supplement No. 1 6/29/51)	2,327,703.02
Transmission (PCS Supplement No. 1 6/29/51)	15,590,744,42
Grand Total (a)	\$46,189,256.44

⁽a) See notes included in Supplement No. 1 dated June 29, 1951, concerning changes in funds, capacity, etc.

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Lort Artist Reddveleyseni (a)
Tota Lalors Existing
This Addition - Twin Lakes
Fub-Total Generation

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265, 183, 30 95, 223, 89 1, 227, 000, 00 527, 000, 00 528, 270, 809, 00

2,327,703,00 15,500,744,42 246,189,256,44

(a) See notes included in Supplement No. 1 dated Jane 29, 1951, demonstring changes in Faure, separatly, etc.

APPENDIX III

POWER COSTS

I	System Capacity (See PCS Supplement No. 1 dated 6/29/51)	
II	Energy Requirements @ Substation - KWH Energy Requirements with 9% Transmission Loss - KWH Energy Generated for Lake Superior District Power Grand Total Energy Requirements	470,435,168 517,000,000 40,000,000 557,000,000
III	Energy Generated at Each Plant (See PCS Supplement No. 1 dated 6/29/51)	

IV Costs of Generation (See PCS Supplement No. 1 dated 6/29/51)

E	Cummons Production Conta			
5.		\$2,130,	000	
	(b) Diesel	352,		
	(c) Hydro	107,		
	(d) Purchase	23.		8 0 /30 FRO
		\$2,612,	570	\$ 2,612,570
6.	Taxes (PCS Supplement No. 1 6/29/5			47,000
7.	Insurance (PCS Supplement No. 1 6/	29/51)		50,580
8.	Interest, Amortization & Replaceme	nts		
	(4) -1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	\$ 129,		
	(b) 25,391,000 @ 4.1%	1,040,		
	(c) Replacements (Generation)	100,		
		\$1,269,		\$ 1,269,800
9.	Total Generation Expense			\$ 3,979,950
	Net KWH Generated & Purchased			557,000,000
	Mills/KWH Generated & Purchased			7.12
10.	Transmission		1	
-	Total Annual Expense (PCS Suppleme	nt No.	1 6/29/51) 1,220,130
11.	Administrative & General			
	Total Annual Expense (PCS Suppleme	nt No.	1 6/29/51) 500,894
12.	Grand Summary			
	(a) Generation			\$ 3,979,950
	(b) Transmission			1,220,130
	(c) Administrative & General			500,894
	Total			\$ 5,700,974
	Less Sales ISDFCo. (PCS Supplement	No. 1		108,300
	Net Cost to Cooperative			\$ 5,592,674
	KWH Delivered to Cooperatives			470,051,820
	¢/kwh Delivered			1.19
	d\vmi perraga			/

(See FCE Semilement Mg. I dered 6/29/91) 45,060,268 517,000,000 46,000,000 Illa - getfareded & averaged waren't be HUM - seed notashmanent We drive ameromopes ground 002,000,5-0 000,54 000,56 Taxos (III Supplement No. 1 6/29/51) (a) 2,879,800 @ 4,5% \$1,187,868 080,000,000 Total Ofreration Expense Total angual Expense (NES Supplement No. 1.6/29/51) \$00,894 \$,592,674 \$,592,674 Lega Seles LSDFCo, (RES Supplement No. 1 (/29/51)